



Integrated Science 351

COURSE SYLLABUS: Fall 2014

Instructor: Beverly Trina Cannon, MS

Office Location: CHEC Room 229

Office Hours: Before Class and After Class on class nights

Office Phone: 214-868-5445

Office Fax:

**University Email Address: beverly.cannon@tamuc.edu
becannon@dallasisd.org
cannonb75@gmail.com**

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

The required text is available from the campus bookstore. Students will need the "packet" which has been prepared for this class. A calculator is recommended for each student; a simple inexpensive 5-function calculator will work. In addition to the class packet, students will need computer and printer access.

Course Description

Science is an interesting and diverse topic; it is the instructor's intent to demonstrate that learning and teaching can be enjoyable as well as educational. Science is what allows mankind to function in a productive manner. We will explore the question, "What is Science?" and help each individual grasp an understanding of his/her own philosophy of teaching.

Students will participate through hands-on experiments, a cooperative learning environment, and lecture. Pedagogy, methods and techniques, critical thinking, data analysis, proper handling of equipment, and content will be explored in this course as well as current educational issues that have become newsworthy.

Student Learning Outcomes

1. Students will gain a better pedagogical understanding.
2. Students will be better prepared to achieve success completing the TExES exam.
3. Students will assist the instructor through cooperative learning to provide interesting and practical science knowledge and skills for taking instruction into the classroom and everyday life.
4. Students will be aware of current issues in education on a local, state and national levels and the impact of these issues on the active classroom teacher.

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

The instructional methods for this course will vary with the topic being explored. Students will be attentive through any lecture, providing the instructor/presenter their full attention. Questions will be welcomed and are encouraged during lecture, however **students will not engage in "personal discussions" thus disrupting class.**

Students will write four (4) commentary papers of 250-300 words during the semester. This will be a comment on a current topic in education/science. Use the APA style to cite the references. This will be written as an editorial, stating pros and/or cons of the topic and its impact on the current/future educator.

Students will be working in groups to complete labs throughout the semester. It is imperative that students do NOT miss class as their group will not have each member's contribution. Any missed classes will not be made up. For clarification purposes, there are NO make-up labs. This includes any lab section of a test.

GRADING

The following scale will be used for determining final course grades:
Class participation-25%, exams-25%, notebook-25%, activities and labs-25%.

90% < A < 100%
80% < B < 89%
70% < C < 79%
60% < D < 69%
F < 60%

Plagiarism or cheating will not be tolerated for any reason and violation will provide the individual(s) involved with a failing grade and a referral to the dean's office for further disciplinary action.

TECHNOLOGY REQUIREMENTS

Pre-service teachers need to incorporate technology into their learning so that they can take this knowledge and understanding into their classrooms as they facilitate learning. Throughout this course, students will be using tools and technology to complete laboratory procedures. Students will need computer and printer access to complete various assignments. Students should expect a large amount of printing through the duration of this course.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

I am a physics teacher for Dallas ISD at Gilliam Collegiate Academy. So I will be arriving here at CHEC by 4:30 PM providing the traffic problems are minimal. Students are welcome to visit with me

prior to the beginning of class or immediately following the close of class. Since I will probably be arriving close the beginning of class, I suggest you e-mail me or text me to let me know that you do need to see me. For a time other than these indicated, please feel welcomed to call or email to schedule an appointment. I will plan to meet you here if you need to see me on a day other than Monday or Tuesday.

All written communication needs to be through this email address:
cannonb75@gmail.com or text me at 214-868-5445

Students will be expected to regularly check their email provided by the University through eCollege as this address is provided to the instructor. In ALL email, students are required to include the following information in the subject line: the course name, last then first name, and a (very) brief statement/inquiry.

e.g. Subject: IS 352, Cannon, Trina, lesson #3 question

This will allow all inquiries to be answered as soon as possible. If a response is not received within 2-weekdays then assume there was a problem with the email and please follow-up through other contact options.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Violation of any class policies will be reflected on the student's final grade for the course.

1. Be professional. You are completing your degree and preparing for the classroom as the facilitator of instruction. Your attitude should reflect your professionalism which should include the remaining class policies.
2. Be here. Absences will result in lowering your overall grade. If you know in advance that you are going to miss class, please inform me **in writing**-email is preferred.

This class meets only 10 times therefore missing even one class results in missing a large amount of material. Excessive absences may result in student being dropped from class with a failing grade.

3. Be on time. Tardiness will be a direct reflection of your professional attitude. This class meets on Tuesday 5:00 – 9:00 PM. This is a lab class and time must be utilized effectively. It is important that you arrive to class on time. Excessive tardiness will result in a low participation grade for this course and the result will be reflected in student's final grade.

As a teacher, you will be expected to turn in grades on time as well as meeting other deadlines; again be professional. Absences will not be considered a "good reason" for turning in late assignments. All due dates are given in advance; take them seriously as late work is not accepted.

4. Be courteous. Cell phones will be turned off; failure to comply will result in the student being excused from class. I will give you my undivided attention and I expect the same of each student. No electronic devices (this includes use of a computer/tablet) will be permitted during class unless arrangements are made in advance with the instructor or unless they are an integral part of the lab/lesson experience.

University Specific Procedures

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

COURSE OUTLINE / CALENDAR

Domain IV-Science

Competency 24 (safe and proper laboratory processes)

Competency 25 (scientific inquiry)

Competency 27 (unifying concepts and processes in science)

Competency 28 (theory and practice of science teaching)

Competency 29 (assessments in science learning)

Competency 30-34 (physical science)

Competency 35-37 (life science)

Competency 38-41 (Earth and space science)

Day	Date	Topic	Activities	Graded
Mon	8/25	Introductions – What is Science? Competency 24 (safe and proper laboratory processes) Competency 25 (scientific inquiry) Basis of Science (Pages 1-10)	Learning Styles Inventory Petals around the Rose Piaget Inventory Button Kingdom Metric System Dimensional Analysis	LR - 10pts
Mon	9/1	No Class Basis of Science (all pages)		
Mon	9/8	Competency 27 (unifying concepts and processes in science) (Pages 11-20) Speed (Pages 1-10)	Commentary Paper Lab Activities	LR - 10pts
Mon	9/15	Competency 27-28 (unifying concepts and processes in science) (Pages 21-30) Speed (Pages 11-22)	Lab Activities	LR - 10pts
Mon	9/22	Competency 29 (assessments in science learning) (Pages 31-40) Motion and Force (Pages 1-10)	Lab Activities	LR - 10pts
Mon	9/29	Competency 30-34 (physical science) Motion and Force (Pages 11-19)	Lab Activities Commentary Paper	CP- 10pts LR - 10pts
Mon	10/6		TEST 1	Ex – 100 pts
Mon	10/13	Competency 29 (assessments in science learning) (Pages 31-40) Energy and Heat (Pages 1-8)	Lab Activities	
Mon	10/20	Competency 30-34 (physical science) (Pages 41- 50) Energy and Heat (Pages 9-16)		
Mon	10/27	Competency 30-34 (physical science) (Pages 51-60) Electricity and Magnetism (Pages 1-14)	Lab Activities Commentary Paper	CP- 10pts
Mon	11/3	Competency 35-37 (physical science) (Pages 61-70) Electricity and Magnetism (Pages 15-26)	Lab Activities	
Mon	11/10	Competency 35-37 (physical science) (Pages 61-70)	Lab Activities	
Mon	11/19		TEST 2	Ex - 100 pts
Mon	11/24	Competency 30-34 (physical science) (Pages 71-80) Harmonic Motion (Pages1-16)	Lab Activities PROJECT DUE	PJ- 100 pts
Mon	12/1	Competency 30-34 (physical science) (Pages 81-90) Harmonic Motion (Pages17-33)	Lab Activities Commentary Paper	CP- 10pts
Mon	12/8	Competency 38 -41 (physical science) Pages 91-94)	Lab Activities	
Mon	12/7	Exam	Exam	Ex - 100 pts